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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 08/863,457 | 05/27/1997 | RAJEEV KRISHNAMURTHI | QCPA377CIP | 4925 |
| 23696 | 7590 | 12/12/2003 | EXAMINER | |
| Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714 | | | NGUYEN, STEVEN H D | |
| | | ART UNIT | PAPER NUMBER | |
| | | 2665 | 4 | |
| DATE MAILED: 12/12/2003 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------------|----------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 08/863,457 | KRISHNAMURTHI ET AL. |
| | Examiner Steven HD Nguyen | Art Unit 2665 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 September 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 is/are rejected.
- 7) Claim(s) 15-17 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

| | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-2, 6, 8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (USP 6049543) in view of Bolon (USP 5822420).

Sauer discloses a mobile switching center (MSC) 230 connected to a base station subsystem (BSC and BTS) 220 and 260 via an IS-634 A-interface (Fig. 1B). However, Sauer fails to disclose a step of detecting the occurrence of condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a mobile switching center for transmitting to the mobile subscriber via base station. In the same field of endeavor, Bolon discloses a method of detecting the occurrence of condition whereby a mobile subscriber attempts to make a call while another

party is attempting to call the same mobile subscriber and generating a message signal at a switching center for transmitting to the mobile subscriber 32a via base station 26 (See Fig 3, col. 3, lines 3-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a signaling protocol as disclosed by Bolon for detecting the occurrence of condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center for transmitting to the mobile subscriber via base station into Sauer's communication system. The motivation/suggestion would have been to notify the end points and correct the procedure for establishing a telephone call in a communication system.

4. Claims 3-5, 7, 9-10 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer and Bolon as applied to claims 1, 6 and 11 above, and further in view of Vucetic (USP 5873036).

Sauer and Bolon do not explicitly recite that a service request message, page response message, the paging signal and the page message signal is Alert With Information Message Signals in IS-634 interface.

Vucetic shows transmitting service request message, page response message, Alert With Information Message Signals between the MSC, SRC-BU and MU by using IS-634 protocol (Figs 2-6). To use Alert With Information Message Signals would have been obvious to one of ordinary skill in the art because Alert With Information Messages have been widely used to represent incoming calls and other data from a base station to a mobile unit over a voice channel.

Allowable Subject Matter

5. Claims 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 9/22/03 have been fully considered but they are not persuasive.

In response to pages 7-8, the applicant states that neither Sauer/Bolon teach a method for generating a message signal upon detection by MSC of a condition whereby a mobile subscriber attempts to originate a call while another party is attempting to call the mobile subscriber and Bolon does not disclose a wireless subscriber. In reply, Sauer discloses a structure of wireless system which includes base station, MSC, IS -634 A interface. Bolon discloses a signaling protocol for detecting the occurrence of condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center 28 "reads on MSC" for transmitting to the mobile subscriber 32a via base station 26 via wireless link "col. 1, lines 19-20 and col. 3, lines 54 to col. 4, lines 5 for providing a wireless link between RBU 26 and subscriber 32) (See Fig 3, col. 3, lines 3-15).

7. In response to applicant's argument that the teaching of Bolon is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned,

in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bolon discloses a signaling protocol for detecting the occurrence of condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center 28 “reads on MSC” for transmitting to the mobile subscriber 32a via base station 26 via wireless link “col. 1, lines 19-20 and col. 3, lines 54 to col. 4, lines 5 for providing a wireless link between RBU 26 and subscriber 32) (See Fig 3, col. 3, lines 3-15).

Since, it discloses base station and Air interface. It is analogous art.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Bolon discloses a signaling protocol for detecting the occurrence of condition whereby a mobile subscriber attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center 28 “reads on MSC” for transmitting to the mobile subscriber 32a via base station 26 via wireless link “col. 1, lines 19-20 and col. 3, lines 54 to col. 4, lines 5 for providing a wireless link between RBU 26 and subscriber 32) (See Fig 3, col. 3, lines 3-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a signaling protocol as disclosed by Bolon for detecting the occurrence of condition whereby a mobile subscriber

attempts to make a call while another party is attempting to call the same mobile subscriber and generating a message signal at a switching center for transmitting to the mobile subscriber via base station into Sauer's communication system. The motivation/suggestion would have been to notify the end points and correct the procedure for establishing a telephone call in a communication system.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

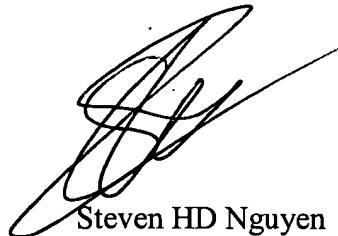
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Steven HD Nguyen
Primary Examiner
Art Unit 2665
12/09/03